IEC 61084-2-1

Edition 2.1 2024-03
CONSOLIDATED VERSION

INTERNATIONAL STANDARD

NORME INTERNATIONALE

colour inside

Cable trunking systems and cable ducting systems for electrical installations – Part 2-1: Particular requirements – Cable trunking systems and cable ducting systems intended for mounting on walls and ceilings

Systèmes de goulottes et systèmes de conduits-profilés pour installations électriques – Partie 2-1: Exigences particulières – Systèmes de goulottes et systèmes de conduits-profilés prévus pour être montés sur les murs et les plafonds



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CABLE TRUNKING SYSTEMS AND CABLE DUCTING SYSTEMS FOR ELECTRICAL INSTALLATIONS –

Part 2-1: Particular requirements – Cable trunking systems and cable ducting systems intended for mounting on walls and ceilings

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This consolidated version of the official IEC Standard and its amendment has been prepared for user convenience.

IEC 61084-2-1 edition 2.1 contains the second edition (2017-03) [documents 23A/827/FDIS and 23A/834/RVD] and its amendment 1 (2024-03) [documents 23A/1060/FDIS and 23A/1068/RVD].

In this Redline version, a vertical line in the margin shows where the technical content is modified by amendment 1. Additions are in green text, deletions are in strikethrough red text. A separate Final version with all changes accepted is available in this publication.

International Standard IEC 61084-2-1 has been prepared by subcommittee 23A: Cable management systems, of IEC technical committee 23: Electrical accessories.

This second edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

- classification;
- construction;
- mechanical and electrical properties.

This International Standard is to be used in conjunction with IEC 61084-1:2017.

This document has been drafted in accordance with the ISO/IEC Directives, Part 2.

This part of the IEC 61084 series supplements or modifies the corresponding clauses of IEC 61084-1:2017 as follows:

– where no particular clause or subclause of IEC 61084-1 is mentioned, the corresponding clause or subclause of IEC 61084-1 applies as far as is reasonable;
– where “addition” or “replacement” is stated, the relevant text of IEC 61084-1 is to be adapted accordingly;
– subclauses, figures and tables which are additional to those in IEC 61084-1 are numbered starting from 101.

A list of all parts in the IEC 61084 series, published under the general title *Cable trunking and cable ducting systems for electrical installations*, can be found on the IEC website.

The committee has decided that the contents of this document and its amendment will remain unchanged until the stability date indicated on the IEC website under webstore.iec.ch in the data related to the specific document. At this date, the document will be

- reconfirmed,
- withdrawn, or
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CABLE TRUNKING SYSTEMS AND CABLE DUCTING SYSTEMS FOR ELECTRICAL INSTALLATIONS –

Part 2-1: Particular requirements – Cable trunking systems and cable ducting systems intended for mounting on walls and ceilings

1 Scope

This part of the IEC 61084 series specifies requirements and tests for cable trunking systems (CTS) and cable ducting systems (CDS) intended for the accommodation, and where necessary for the electrically protective separation, of insulated conductors, cables and possibly other electrical equipment in electrical and/or communication systems installations. The maximum voltage of these installations is 1 000 V AC and 1 500 V DC.

These systems are intended for mounting on walls and/or ceilings. They can be embedded, installed in a flush or semi-flush state, surface mounted or mounted away from the surface using fixing devices.

This document does not apply to conduit systems, cable tray systems, cable ladder systems, power track systems or equipment covered by other standards.

2 Normative references

This clause of Part 1 is applicable, except as follows:

Addition:

IEC 60068-2-75:2014, *Environmental testing – Part 2-75: Tests – Test Eh: Hammer tests*

IEC 60228:2004, *Conductors of insulated cables*

IEC 61084-1:2017, *Cable trunking systems and cable ducting systems for electrical installations – Part 1: General requirements*

ISO 535:~~2014~~2023, *Paper and board – Determination of water absorptiveness – Cobb method*

ISO 536:~~2012~~2019, *Paper and board – Determination of grammage*

3 Terms and definitions

This clause of Part 1 is applicable, except as follows:

3.1 *Replace Note 1 to entry by:*

Note 1 to entry: Different types of CTS are shown in Figure 101 and explained in Annexe A.

3.2 *Replace Note 1 to entry by:*

Note 1 to entry: Different types of CDS are shown in Figure 101 and explained in Annex A.

Addition:

3.101
type 2 CTS/CDS
distribution CTS/CDS
CTS/CDS which provides at least the following functions:

- in line junction between two trunking lengths or ducting lengths,
- internal and external changes of direction between two trunking lengths or ducting lengths,
- flat change of direction between two trunking lengths or ducting lengths with the exception of certain systems where such a function is not required e.g. skirting CTS/CDS,
- "T" function between three trunking lengths or ducting lengths with the exception of certain systems where such a function is not required e.g. bench CTS,
- termination of a trunking length or a ducting length

3.102
type 3 CTS/CDS
installation CTS/CDS
distribution CTS/CDS which provides in addition apparatus mounting function

3.103
type 1 CTS/CDS
CTS/CDS that cannot be defined as a type 2 CTS/CDS or as a type 3 CTS/CDS

3.104
surface mounting CTS/CDS
CTS/CDS intended for mounting on a surface

3.105
flush-mounting CTS/CDS
CTS/CDS intended for mounting flush with the surface so that at least 90 % of the product depth is recessed below the finished surface when installed according to manufacturer's instructions

3.106
semi-flush mounting CTS/CDS
CTS/CDS intended to fit within a mounting surface so that more than 10 % of the product depth projects from the finished surface

4 General requirements

This clause of Part 1 is applicable.

5 General conditions for tests

This clause of Part 1 is applicable.

6 Classification

This clause of Part 1 is applicable, except as follows: